ABSTRACT

The present invention provides a resin-encapsulated semiconductor apparatus comprising a semiconductor device having a ferroelectric film and a surface-protective film, and an encapsulant member comprising a resin; the surface-protective film being formed of a polyimide. The present invention also provides a process for fabricating a resin-encapsulated semiconductor apparatus, comprising the steps of forming a film of a polyimide precursor composition on the surface of a semiconductor device having a ferroelectric film; heat-curing the polyimide precursor composition film to form a surface-protective film formed of a polyimide; and encapsulating, with an encapsulant resin, the semiconductor device on which the surface-protective film has been formed. The polyimide may preferably have a glass transition temperature of from 240℃ to 400℃ and a Young's modulus of from 2,600 MPa to 6 GPa. The curing may preferably be carried out at a temperature of from 230℃ to 300℃.